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PCI Interface Board for E6000, E6000H, and E8000 Emulators

HS6000EIC02H User's Manual

Renesas Microcomputer Development Environment System

HS6000EIC02HE

User's Manual

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Preface

The PCI interface board for the E6000 / E6000H / E8000 emulators is described in this description notes. Read this notes and the user's manuals for the E6000, E6000H, and E8000 emulators.

This PCI interface board provides PCI connection of the E6000/E6000H/E8000 emulator to a personal computer incorporating Windows® with the PCI interface, enabling program debugging through an HDI or the High-performance Embedded Workshop.

Notes: 1. Microsoft® and Windows® are registered trademarks of Microsoft Corporation in the United States and/or in other countries.
Microsoft® Windows® 98 Second Edition operating system is referred to as Windows® 98SE in this description notes.
Microsoft® Windows® Millennium Edition operating system is referred to as Windows® Me in this description notes.
Microsoft® Windows NT® operating system is referred to as Windows NT® in this description notes.
Microsoft® Windows® 2000 operating system is referred to as Windows® 2000 in this description notes.
Microsoft® Windows® XP operating system is referred to as Windows® XP in this description notes.

2. Displays in this notes are examples at using the Windows® 2000.
3. Pentium® is a registered trademark of Intel.

Contents

Section 1 Overview 1
1.1 System Configuration 1
1.2 Operating Environments 2
1.3 Environmental Conditions 2

Section 2 Components 5

Section 3 Preparation before Use 7
3.1 Installing the PCI Interface Board 7
3.2 Connecting the PCI Interface Board to the E6000 Emulator 9
3.3 Connecting the PCI Interface Board to the E6000H Emulator 10
3.4 Connecting the PCI Interface Board to the E8000 Emulator 11

Section 4 Setting Up the PCI Interface Board 13
4.1 Procedures 13
4.2 Selecting the PCI Driver 14

Section 5 Notes on Use 15

Section 1 Overview

This section describes the system configuration at PCI connection and the PCI interface board.

1.1 System Configuration

Figure 1.1 shows the system configuration when connecting the E6000 emulator and the USB adapter. The E6000H and E8000 emulators can be connected in the same way. Refer to figures 3.3 and 3.4 when connecting the E6000H and E8000 emulators and the USB adapter, respectively.

The PCI interface board is installed in the host computer containing Windows®.

The PCI interface board and the E6000/E6000H/E8000 emulator are connected through the PC interface cable.

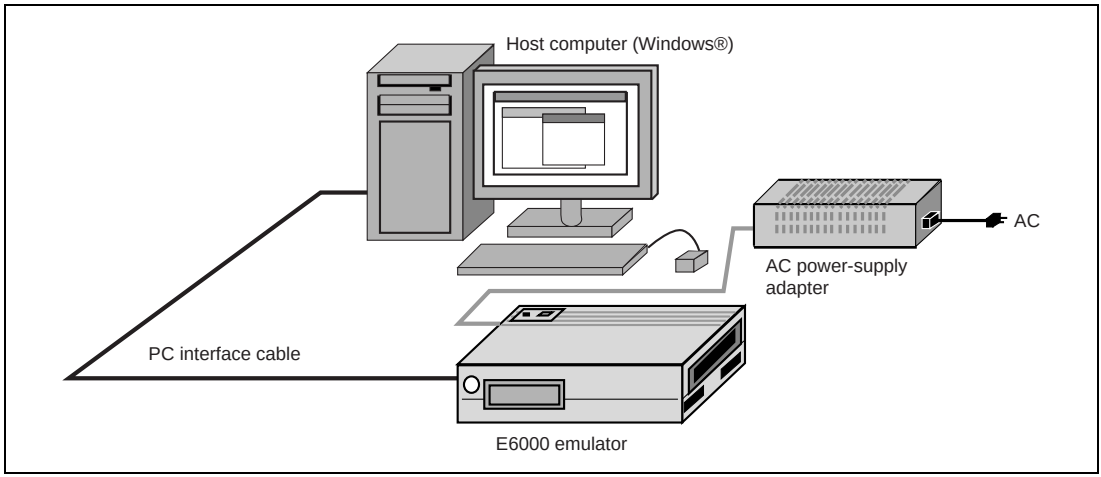


Figure 1.1 System Configuration of E6000 Emulator Connection

1.2 Operating Environments

Table 1.1 Operating Environments

Item	Description
Host computer	Built-in Pentium® or higher-performance CPU (600 MHz or higher recommended); personal computer incorporating Windows® with the PCI slot
	Memory capacity: 128 Mbytes (double or more file size of the load module)
	Hard disk capacity: 50 Mbytes or more (Prepare an area at least double the memory capacity (four-times or more recommended) as the swap area.)
PCI interface	Complied with Revision 2.1
Basic software (OS)	Microsoft® Windows® 98SE, Microsoft® Windows® Me, Microsoft® Windows NT®, Microsoft® Windows® 2000, or Microsoft® Windows® XP

1.3 Environmental Conditions

CAUTION

Observe the conditions listed in table 1.2 when using the PCI interface board. Failure to do so will damage the PCI interface board, the emulator product, and the user system.

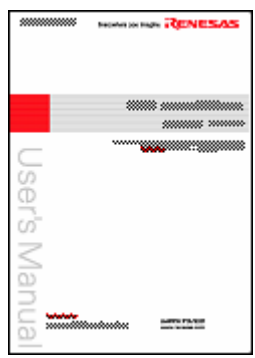
Table 1.2 Environmental Conditions

No.	Item	Specification
1	Temperature	Operating: +10°C to +35°C Storage: -10°C to +50°C
2	Humidity	Operating: 35% RH to 80% RH, no condensation Storage: 35% RH to 80% RH, no condensation
3	Vibration	Operating: 2.45 m/s^2 max. Storage: 4.9 m/s^2 max. Transportation: 14.7 m/s^2 max.
4	Ambient gases	There must be no corrosive gasses present.

Section 2 Components

Table 2.1 lists the components of the PCI interface board.

Table 2.1 Components

Item	Product Name	Configuration	Quantity	Remarks
Hardware	PCI interface board		1	70.00 x 119.91 mm (except for the PCI bracket and projections)
	PC interface cable		1	Cable length: 1.5 m (provided with a ferrite core as a countermeasure for EMI noise)
Documen-tation	PCI Interface Board for E6000, E6000H, and E8000 Emulators HS6000EIC02H User's Manual (This manual)		1	HS6000EIC02HE

Section 3 Preparation before Use

3.1 Installing the PCI Interface Board

⚠ WARNING

Always switch OFF the host computer, emulator product, and user system before connecting or disconnecting the PCI interface board. Failure to do so will result in a FIRE HAZARD and will damage the emulator product, PCI interface board, and the user system or will result in PERSONAL INJURY.

1. Check that the emulator and the host computer are turned off.
2. Open the host computer cover and install the PCI interface board into an extension slot conforming to PCI bus specifications. Gently push the PCI interface board into the connector and fasten the board with the host computer screw.

Note: The installation procedure differs depending on the host computer in use. Be sure to refer to the manual of the host computer.

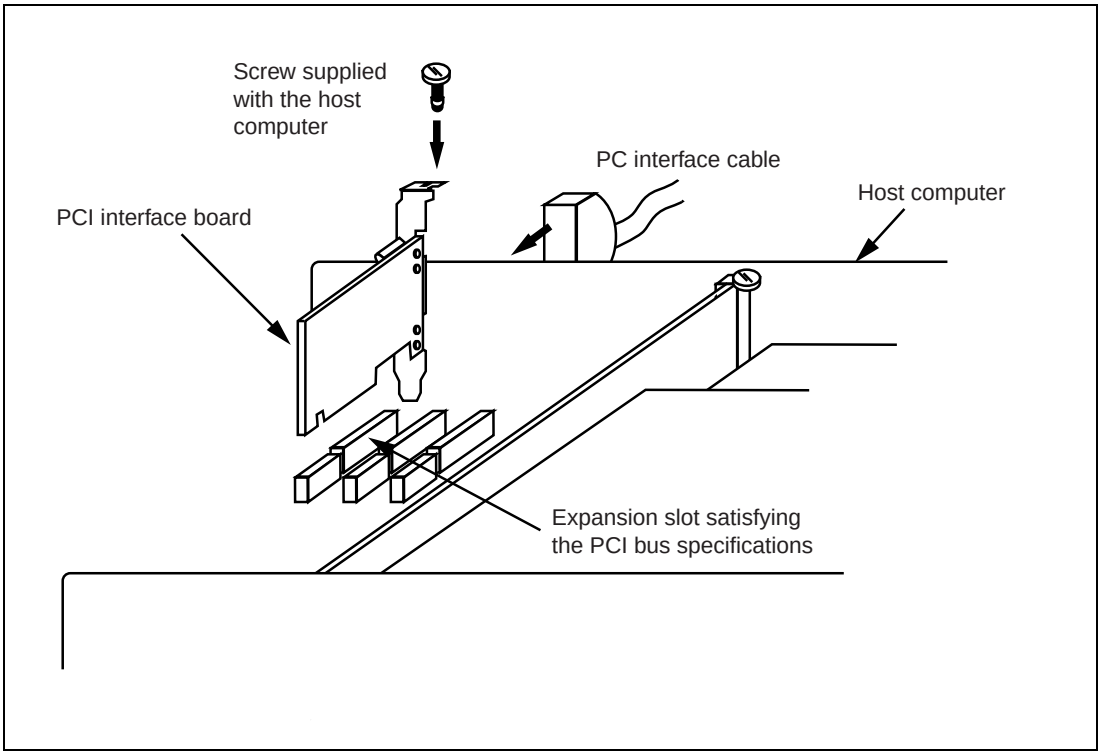


Figure 3.1 Installing the PCI Interface Board

3.2 Connecting the PCI Interface Board to the E6000 Emulator

⚠ WARNING

Always switch OFF the host computer, emulator product, and user system before connecting or disconnecting the PCI interface board.
Failure to do so will result in a FIRE HAZARD and will damage the emulator product, PCI itnerface board, and user system or will result in PERSONAL INJURY.

When using the E6000 emulator, use the PC interface cable supplied together with the PCI interface board, and connect the PCI interface board to the E6000 emulator station through the interface cable as shown in figure 3.2. Connect the PC interface cable connector with a ferrite core to the emulator.

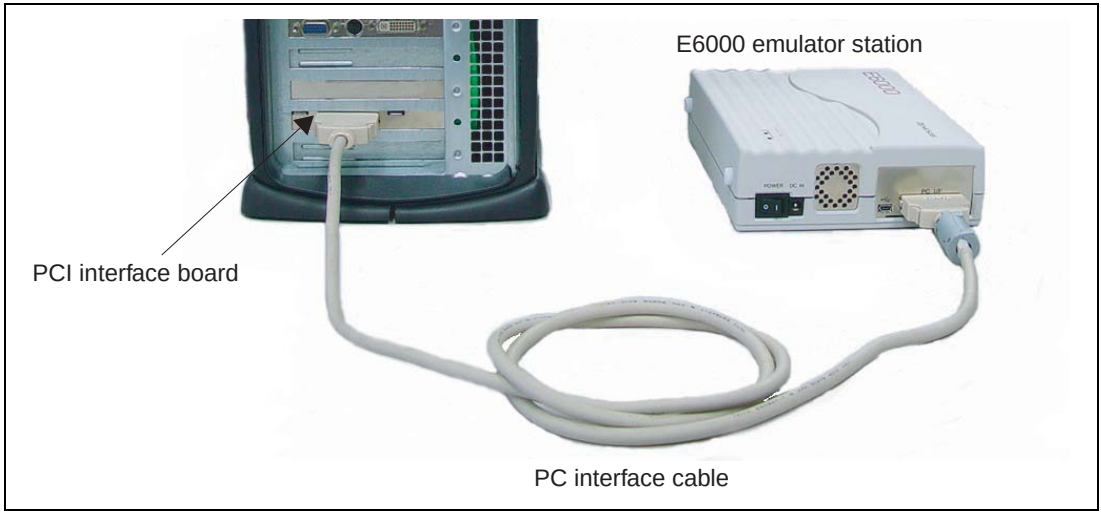


Figure 3.2 Connecting the PCI Interface Board to the E6000 Emulator

3.3 Connecting the PCI Interface Board to the E6000H Emulator

When using the E6000H emulator, use the PC interface cable supplied together with the PCI interface board, and connect the PCI interface board to the E6000H emulator station through the interface cable as shown in figure 3.3. Connect the PC interface cable connector with a ferrite core to the emulator.

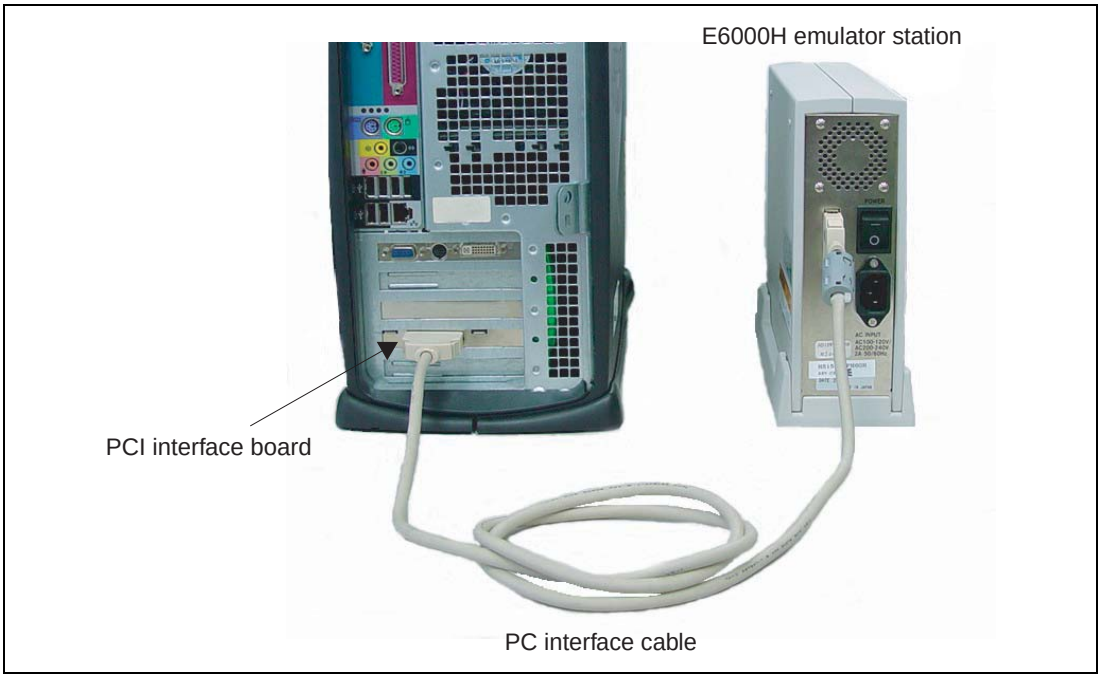


Figure 3.3 Connecting the PCI Interface Board to the E6000H Emulator

3.4 Connecting the PCI Interface Board to the E8000 Emulator

When using the E8000 emulator, use the PC interface cable supplied together with the PCI interface board, and connect the PCI interface board to the E8000 emulator station through the interface cable as shown in figure 3.4. Connect the PC interface cable connector with a ferrite core to the emulator.

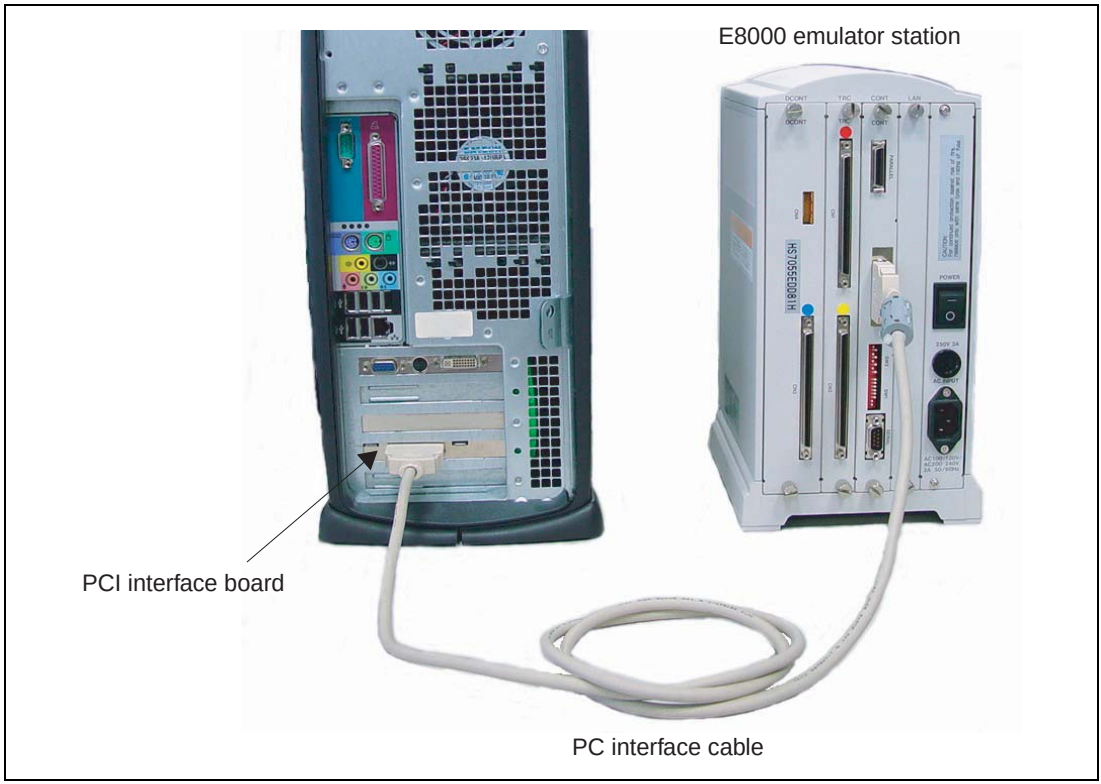


Figure 3.4 Connecting the PCI Interface Board to the E8000 Emulator

Section 4 Setting Up the PCI Interface Board

4.1 Procedures

Figure 4.1 shows the setup procedures of the PCI interface board.

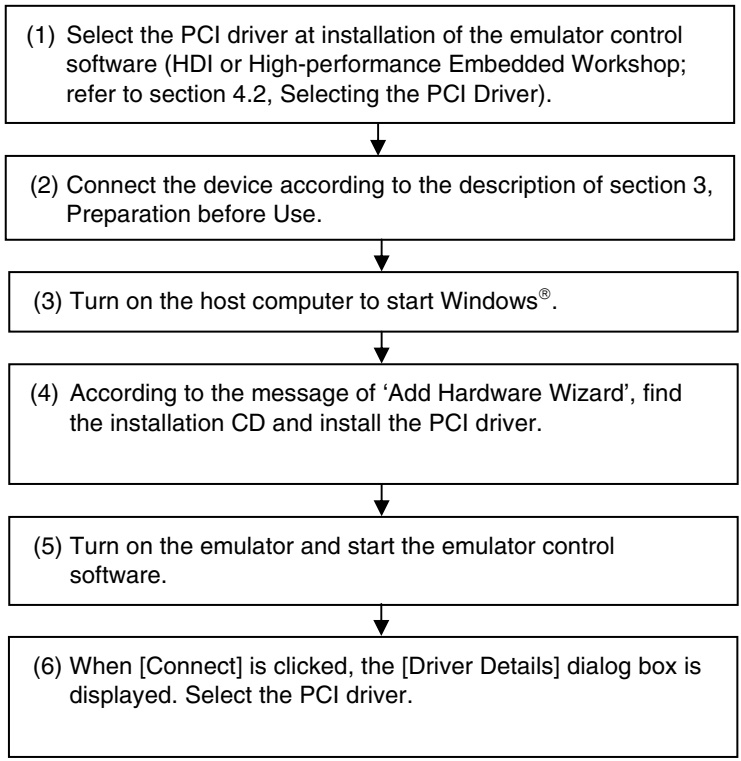


Figure 4.1 Setup Procedures

4.2 Selecting the PCI Driver

During installation of the emulator control software (HDI or High-performance Embedded Workshop), select the PCI driver in the [Select Components] dialog box.

Even if the [Select Components] dialog box is not displayed in some products, it is not a problem because the driver is automatically installed.

Notes: 1. If the PCI driver is not selected in the [Select Components] dialog box, the PCI interface is not available.

2. If the PCI driver is not displayed in the [Select Components] dialog box, operating environments in table 1.1 will not be satisfied. Check the operating system in use.

Section 5 Notes on Use

1. This PCI interface board is only for use with the E6000, E6000H, or E8000 emulator. Do not use any other emulator together with the PCI interface board.
2. Protect the PCI interface board from excessive impacts and stresses. Keep out of direct sunlight, heat, and high humidity.
3. Do not disassemble the PCI interface board or interface cable.
4. Be sure to turn off the host computer and the emulator before inserting or removing the PCI interface board.

PCI Interface Board for E6000, E6000H, and E8000 Emulators
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